DOCUMENT RESUME

ED 141 439 UD 017 028

AUTHOR Levine, Daniel U.; Meyer, Jeanie Keeny
TITLE Level and Rate of Desegregation and White Enrollment Decline in a Big City School District.
PUB DATE 8 Apr 77
NOTE 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, N.Y., April 4-8, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Black Students; *Boards of Education; *Caucasian Students; Elementary Education; Elementary Schools; Enrollment; *Enrollment Trends; Integration Studies; *Literature Reviews; Racially Balanced Schools; *School Integration; Socioeconomic Status
IDENTIFIERS Coleman Report; *Missouri (Kansas City); Resegregation; White Flight

ABSTRACT

The literature of white enrollment decline in desegregated schools is described in this report. The controversy over whether or not desegregation accelerates the enrollment decline of whites from central city public school districts is discussed in terms of school integration, black enrollment patterns and trends, resegregation of predominantly black public schools, and white flight to the suburbs. A study on enrollment trends from 1956 to 1974 in the Kansas City, Missouri public school district is reported. This large midwestern district, surrounded by predominantly white smaller districts, has been undergoing a decline in the proportion of white student enrollment. Enrollment data for the district were examined to determine whether the level and rate of desegregation have been associated with declines in white enrollment. The sample for this study consisted of all the 75 schools which served as elementary schools during all or most of the period between 1956 and 1975. The findings of this study indicated that white enrollment decline has tended to accelerate in schools with more than 30 percent black students and/or a rapid increase in the percentage of black students. The report recommended that policymakers be cautious in determining the level and rate of desegregation in large city school districts. (Author/JP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED141439

23.11

LEVEL AND RATE OF DESEGREGATION AND WHITE ENROLLMENT DECLINE IN A BIG CITY SCHOOL DISTRICT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Daniel U. Levine, Professor of Education
University of Missouri - Kansas City

Jeanie Keeny Meyer, Research Analyst
Kansas City, Missouri Police Department

UD017028

Paper presented at the annual meeting of the American Educational Research Association, New York City
April 4-8, 1977

LEVEL AND RATE OF DESEGREGATION AND WHITE ENROLLMENT DECLINE IN A BIG CITY SCHOOL DISTRICT

Daniel U. Levine and Jeanie K. Meyer
May, 1976

INTRODUCTION

During the past few years a major research controversy has arisen on the issue of whether or not desegregation accelerates the enrollment decline of whites from central city public school districts.

Until 1975, only a small number of studies were reported dealing with this issue. Among these were studies in which Giles, Cataldo, and Gatlin[1] reported data which led them to conclude that there is no clear "tipping point" or "threshold" at an hypothesized 30 percent minority level beyond which schools tend to resegregate more rapidly than might happen below this level. These studies, however, were conducted in Florida, which has county-wide school districts surrounded by districts also undergoing desegregation; for this reason the conclusions might not be applicable in states outside the South, which generally lack statewide desegregation efforts that inhibit white flight by shutting off avenues of "escape" from systematic desegregation plans.

In the spring of 1975, Coleman[2] reported on the preliminary results of a study he and his colleagues conducted using data on the degree to which white and black students attended segregated schools between 1968 and 1973. To focus on the issue of whether segregation in relatively large districts (25,000 or more students) was being perpetuated or increased due to "segregating responses on the part of whites" to desegregation, Coleman and his colleagues conducted a separate analysis on the seventy largest central city school districts in the United States. Using regression analysis, they concluded that among the twenty largest districts, there was an increase of 17% in the proportion of whites leaving districts in which the percentage of black students was 50% and the increase in black proportion was 5% in the preceding two years, as compared with hypothetical estimates for districts with no black students and no increase in proportion black.

The release of this preliminary report and the widespread publicity it received precipitated a great deal of discussion both in professional publications and in the popular press. Professional reactions were mostly critical of the methods Coleman and his colleagues had employed in their study and the conclusions they drew, which critics did not believe substantiated the existence of a so-called "white flight" phenomenon over and beyond natural changes which have been occurring in urban areas due to such causes as deterioration of housing stock.

For example, Coleman's conclusions were disputed by Farley,[3] who collected data on 40 Southern and 75 Northern or Western city school districts which enrolled sixty percent of the nation's black elementary students and twenty percent of the nation's white elementary students. Utilizing a measure of segregation based on the degree to which schools in these districts were similar or dissimilar to the respective district percentages, Farley studied changes in enrollment between 1967 and 1972 and concluded that neither in the South or North "is there a significant relationship between school integration and white flight."[4]

After examining patterns in a number of cities which actively implemented integration plans, however, Farley further concluded that his data were

> . . . consistent with the hypothesis that whites fear integrated schools with large black enrollments and withdraw their children from public schools prior to integration. They also are consistent with many other hypotheses. Cities with a high proportion black may have particularly unfavorable tax bases, may be losing employment, may be viewed by whites as dangerous or may have an especially old stock of housing. . . .when public schools are desegregated or when they become predominantly black, some white parents--perhaps many--hasten their move away from the central city. However, whites /also/ are moving out of central cities for many other reasons.[5]

Jackson[6] identified several "methodological limitations" in Coleman's approach and then reanalyzed the data and added additional data dealing separately with the 19 largest school districts and 50 next largest districts. These analyses suggested "rather different findings and conclusions"[7] than those of Coleman:

> . . . First, in the 69 largest school districts the rate of white public school enrollment declines between 1970-72 were generally greater in districts with a higher proportion of blacks. Second, in the 19 largest districts (all in large cities) the declines in white enrollment over this period were also generally higher in districts with greater increases between 1968-1970 in the extent to which the average white pupil had black schoolmates, and this relation holds even after controlling for a number of other factors. Third, in the 19 largest districts, declines in white public school enrollment are not consistently related to changes between 1968-1970 in the degree of segregation within the districts. . . Fourth, in the 50 next largest districts declines in white public school enrollment are not related to either changes in the degree of racial proximity or changes in the degree of desegregation, as least not after controlling for the district's proportion of blacks /original italics/.[8]

One of the most virulent criticisms of Coleman's methods and conclusions originated with Rossell,[9] who, after reporting the results of her own analysis of desegregation and enrollment trends in 70 large and medium sized northern school districts, concluded that "This study . . . shows with clear, verifiable, data, that there is little or no white flight as a result of school desegregation . . . Coleman has pulled off one of the great swindles of public policy research."[10] Rossell's data dealt with school racial composition over a ten year period from 1963 to 1973. Her data gathering and analytic methods incorporated several advances over previous studies, including collection of data directly from persons in the cities in the sample, utilization of longitudinal data covering a longer time span, construction of a useful quantitative measure of the proportion of black and white students reassigned for the purposes of school integration and statistics for the analysis of time-series trends. In addition, Rossell presented a large amount of raw data so that readers could check her analysis and draw their own conclusions.

As with other studies examining relationships between school integration and white enrollment decline, Rossell's research still presents a variety of problems involving the definition of desegregation, the types of school districts which should be included in a single analysis (e.g. central city only or city and suburban), and the proper unit for analysis (e.g. school level, district level, metropolitan level). Such issues are critical because they determine whether one ends by comparing

entities which may be very different with respect to the issue in question, as when heavily-minority central city districts ringed by predominantly white suburban districts are compared with county-level districts adjacent to districts which already have substantial desegregation. Logically, the likelihood of white withdrawal from the public schools following desegregation is much greater in the former case than in the latter.

Rossell attempted to minimize such differentials in constituting her sample but did not entirely succeed because of the need to maintain a relatively large sample size in order to carry out multivariate analysis. In addition, her study takes little account of the possibility that imminent large-scale desegregation such as might follow a court order may stimulate as much or more white withdrawal before desegregation as after; hence her method of time series analysis may be misleading for cities like San Francisco, where the rate of white withdrawal increased to 4.1% two years before a major desegregation plan was implemented and then fell off to 3% after desegregation.

Still another major critique of Coleman's conclusions has been prepared by Green and Pettigrew,[11] who painstakingly reviewed the development of his analysis at four points in time and concluded that "there has been a confusion between his limited research and his sweeping views against court-ordered desegregation."[12] More specifically, Green and Pettigrew reanalyzed Coleman's data and also introduced data of their own before reaching the following conclusions concerning the relationship between desegregation and white enrollment decline in the public schools:

1. There has been an enormous, long term trend of whites leaving the central cities for the suburbs and blacks coming into the largest central cities.
2. There is agreement among the studies that there is little or no effect of desegregation on the 'white flight' of students in medium- and smaller-sized cities.
3. There is also agreement that there is little or no effect of desegregation on the 'white flight' of students in metropolitan-wide districts.
4. Desegregation required by federal court orders has not had different effects on 'white flight' from other desegregation of equal magnitude.
5. The loss of white and black students from large urban school systems is significantly related

to the proportion of black students in the systems.

6. Extensive school desegregation in the largest, non-metropolitan school districts, particularly in the South, may hasten the 'white flight' of students in the first year of the process; but at least part of this effect may be compensated for in later years.[13]

More recently, Wegman[14] reviewed the research dealing with change in school racial composition following desegregation and reached tentative conclusions generally in agreement with those of Green and Pettigres: "White flight may or may not occur. . . .The degree of white flight to be expected when there is governmental intervention to desegregate schools may vary depending on the proportion of minority students who are being assigned to a given school, and the social class gap between the minority and white students." Both these conditions--high minority proportion and large social class gap between minority and white students--tend to be more characteristic of big city school districts than of small city or suburban school districts.

In addition, Wegman also clearly identified a number of additional variables which appear to play a part in determining whether white enrollment decline accelerates following desegregation. For example, his review of the literature suggested that non-entrance of whites (i.e. failure to enroll students in local public schools) often may be more important than withdrawal of currently-enrolled children, depending on the type and rate at which racial transition is occurring in neighborhood housing. Similarly, his analysis suggested that court-ordered desegregation may have differing effects on white enrollment than does desegregation attributable to neighborhood change, and that the pace and level of desegregation may affect decisions to withdraw from or not enroll children in the public schools. These findings suggest that it often is misleading to draw conclusions from samples which do not take account of building- or neighborhood-level conditions and changes in school composition.

To a degree, the differences of opinion among researchers studying white withdrawal and school desegregation now have been reduced to a minimum following the most recent reanalysis Coleman and his colleagues conducted on their own data. Responding to the criticisms of Jackson

and other critics, Coleman[15] reported that the results of his latest analysis

> . . . show that the effect of desegregation on white loss is dramatically different for a city that has largely black schools and largely white suburbs. . . .and for a city that has a small proportion of blacks and no sharp racial differences between city and suburbs. . . .The former condition characterizes the larger, older, Northern and Eastern cities, while the latter more nearly characterizes newer cities in the West, and Southern cities with countywide school districts . . . .[16]

In short, for at least some of the participants in the controversy on desegregation research which has occurred during the past two years, there is now explicit agreement that accelerated white withdrawal connected with school desegregation is most likely to occur in large Northern districts with a relatively high proportion of minority students surrounded by predominantly white suburban districts.

One of the major lessons which emerges from the controversy among researchers concerning "white flight" is that school districts with greatly differing characteristics with respect to social class and racial composition, city-suburban differentiation, regional location, type and extent of desegregation action and other important characteristics should not be lumped together in trying to determine whether desegregation accelerates the withdrawal or decrease in enrollment of white students in the schools. Respecting this conclusion, it would be useful to have more case studies of enrollment patterns in individual school districts. Such studies allow for longitudinal analysis at the individual school building level to determine whether the converging views of researchers using district-level data are confirmed by events at the level at which the phenomena in question actually occur. The purpose of the present study is to provide such an analysis for the Kansas City, Missouri Public School District, a relatively large central city school district in the lower Midwest.

METHODS AND RESULTS

The Kansas City, Missouri Public School District is a central city school district which has been increasing in percentage of minority students for most of the past twenty years. The number of white students declined from 32,412 in 1956 to 21,405 in 1976, while the number of black

students increased from 10,076 to 33,001.

Located in a metropolitan area with a 1970 population of 1,253,916 the district serves only part of Kansas City, Missouri, which also includes all or part of 12 other school districts. However, most of the minority population of the city is included within the Kansas City School District. As of 1972-1973, the percentage of minority students in the district was 54%, as compared with 8% for the public school population of the remainder of the metropolitan area.

Although data on the percentage of minority students inside and outside the district in 1950 and 1960 are not available, it is clear that compared with surrounding districts, the Kansas City School District has had a relatively high proportion of minority students throughout this period, during which time many of its schools have changed from predominantly white to desegregated to predominantly black. In addition, the median 1970 family income within the district ($8803) already was considerably lower than that of the metropolitan area as a whole ($10,568).

To determine whether white enrollment decline in the district has been associated with level and rate of desegregation at the school building level, data were examined for a sample consisting of all the 75 schools which served as elementary schools during all or most of the period between 1956 and 1975.

It should be noted that nearly all of the desegregation which occurred in the Kansas City School District during the period under study was "natural"; i.e. there was no court-ordered desegregation plan and only a few schools were briefly desegregated in a limited fashion through busing at various periods in order to relieve overcrowding or to help obtain federal grants available to desegregated school district.

It also should be noted that certain schools may be categorized as having experienced an acceleration of white enrollment decline more than once in this analysis, as in the case of a school in which white enrollment decline might change from ten percent in one four-year period to twenty and then thirty percent in the following two four-year periods.

1. Relationship between percentage of black enrollment and increase in black enrollment percentage in subsequent years.

It frequently is hypothesized that urban schools which have a relatively high percentage of minority students (e.g. thirty to fifty percent)

are more likely to become resegregated (predominantly black) than are schools in which minority students constitute a smaller proportion of the student body. Presumably this might happen because other things being equal, white parents may tend to withdraw their children more readily from schools which they perceive are likely to become predominantly non-white than from schools perceived as having potential for stable integration. This tendency might be particularly evident if members of an incoming minority group were lower in socioeconomic status than students already in a school or if, as probably sometimes happens, some white parents merely assumed that incoming minority students were likely to be socioeconomically disadvantaged.

To investigate the relationship between percentage of black students and subsequent racial change in the Kansas City, Missouri Public Schools, changes in percentage of minority students were compared over two year periods for three groups of schools which for selected years between 1956 and 1974 had the following proportions of black students: A) 15 to 29%; B) 30-45%; and C) 46 to 60%. The results are shown in Table 1.

As shown by the data in Table 1, schools with a proportion of black students between sixteen and twenty-nine percent have had a much smaller increase in percentage black during the subsequent two year period than have schools with a percent of black students between thirty and sixty percent. Although the numbers in the comparison groups for any one year are too small to draw firm conclusions, overall the weighted average increase in the percentage of black students in the subsequent two year period among schools with a percentage of black students between 15 and 29 was 10.5% (485 ÷ 46); the comparable increases for schools between thirty and forty-five percent black and between forty-six and sixty percent black were 18.2% (436 ÷ 24) and 28.2% (310 ÷ 11), respectively. These findings suggest that Kansas City schools with a percentage of black students between sixteen and twenty-nine were more likely to remain stably integrated, at least for the following two year period, than were schools with a higher percentage of black enrollment.

It should be mentioned that the group of Kansas City schools which had between sixteen and twenty-nine percent black students probably has included a higher proportion of schools in which black students were

TABLE 1

Comparisons of Increases in Percentages of Black Students Over Two Year Periods for Kansas City Elementary Schools With Differing Percentages of Black Students* in Selected Years Between 1956 and 1972

*A) Schools 15 to 29 Percent Black in Designated Year
B) Schools 30 to 45 Percent Black in Designated Year
C) Schools 46 to 60 Percent Black in Designated Year

Year for Comparison Groups	Subsequent Time Period for Comparison and Average Percentage of Increase in Black Students	
1958	1958-1960	
	A (N = 3)	8.3%
	B (N = 1)	2%
	C (N = 1)	38%
1960	1960-1962	
	A (N = 5)	16.3%
	B (N = 3)	21%
	C (N = 1)	39%
1962	1962-1964	
	A (N = 7)	14.3%
	B (N = 2)	3.2%
	C (N = 3)	22.5%
1964	1964-1966	
	A (N = 3)	13.7%
	B (N = 4)	8.2%
	C (N = 2)	21.8%
1966	1966-1968	
	A (N = 6)	5.8%
	B (N = 2)	27.1%
	C (N = 1)	36.4%
1968	1968-1970	
	A (N = 6)	7.7%
	B (N = 2)	14.8%
	C (N = 1)	36.4%
1970	1970-1972	
	A (N = 5)	7.7%
	B (N = 4)	29.8%
	C (N = 1)	29.9%
1971	1971-1973	
	A (N = 7)	13.3%
	B (N = 4)	17.1%
	C (N = 1)	19.3%
1972	1972-1974	
	A (N = 4)	6.2%
	B (N = 2)	30.0%
	C (N = 0)	-

bussed in to relieve overcrowding elsewhere than did schools in the other two groups. To the extent that the groups might have differed in this way, our findings may be partly due to school board policies and practicalities limiting the amount of transportation into the schools in question, and to the likelihood that neighborhoods in which these schools are located probably were not undergoing as rapid racial turnover as was true among schools with thirty to sixty percent black enrollment. On the other hand, schools with a black enrollment between forty-five and sixty percent had less "room" to increase substantially in black enrollment in subsequent years than did schools between fifteen and thirty percent black. Taken together, our findings appear to confirm the hypothesis that schools which reach an hypothetical "threshold" in percentage of minority students are more likely to become predominantly minority than schools with a smaller proportion of minority students. This threshold probably varies a good deal in accordance with a number of local conditions such as perceptions of neighborhood services, previous history in a community, social class mixture in school and community, and quality of educational leadership and programming in local schools; for this reason we made no attempt to identify any universal tipping point in the Kansas City, Missouri Public Schools. It does appear to be the case, however, that once Kansas City schools have reached a percentage of thirty to sixty percent black, they have tended to become nearly all black in pupil composition during subsequent years.

2. Relationship between percentage of increase in black enrollment and increase in black enrollment percentage in subsequent years.

It frequently is hypothesized that a rapid increase in the percentage of black students enrolled in a school is more likely to stimulate withdrawal among whites than would a less rapid or more gradual increase. To examine this possibility, we calculated the percentage of increase in two year periods between 1956 and 1972, and then compared the subsequent increase in the following two-year period for two groups of schools: those in which the percentage of black students increased from one to ten percent, and those in which the percentage of black students increased by more than ten percent. The results are shown in Table 2.

TABLE 2

Comparison of increases in Percentages of Black Students Over Two Year Periods for Kansas City Elementary Schools in Which the Increase in Percentage of Black Students in the Preceding One or Two Year Period Was: A) One to Ten Percent and B) More Than Ten Percent*

*A) Schools In Which the Increase in Black Students in Designated Time Period Was Betweem Pme amd Ten Percent
B) Schools in Which the Increase in Black Students in Designated Time Period Was More Than Ten Percent

Time Period for Choice of Comparison Groups	Subsequent Time Period for Comparison and Average Percentage of Increase in Black Students
1956-1958	1958-1960 A (N = 8) 9.0% B (N = 6) 20.8%
1958-1960	1960-1962 A (N = 9) 9.6% B (N = 6) 27.3%
1960-1962	1962-1964 A (N = 8) 7.9% B (N = 8) 17.3%
1962-1964	1964-1966 A (N = 11) 9.6% B (N = 7) 14.1%
1964-1966	1966-1968 A (N = 10) 8.9% B (N = 8) 13.5%
1966-1968	1968-1970 A (N = 9) 6.6% B (N = 8) 18.2%
1968-1970	1971-1973 A (N = 13) 5.9% B (N = 16) 11.1%
1970-1971	1971-1973 A (N = 1?) 8.8% B (N = 6) 19.1%
1971-1972	1972-1974 A (N = 11) 4.4% B (N = 3) 11.2%

As shown in Table 2, schools in which the percentage of black students increased by more than ten percent during the time periods examined between 1956 and 1972 had a much higher increase in percentage of black students during the subsequent two year period than did schools in which black enrollment increased from one to ten percent. On 6 of the 9 comparisons, the increase in percent black among the former group (more than ten percent). For the schools which had an increase in black enrollment of more than ten percent, the weighted average increase in black enrollment during the following two year period was 16.3 (1105 ÷ 68); for schools in which the percentage of black enrollment increased from one to ten percent, the comparable weighted average increase was 7.8% (698 ÷ 90). These results indicate that schools which experienced a substantial and relatively rapid increase in percentage black (i.e. ten percent or more during a one or two year period) also had a much larger subsequent increase in percentage black and, by implication, a much larger decrease in white students, than did schools in which desegregation occurred less rapidly and precipitously.

To further examine the relationships between percent black at several levels of desegregation and subsequent racial composition, we identified four levels of desegregation (the three levels shown in Table 1 plus schools sixty-one to eighty percent black) for selected years between 1960 and 1970 and then examined the percent of black enrollment in these schools four to six years later. The results are shown in Table 3.

As shown in Table 3, schools which were at various levels of desegregation generally tended to become resegregated in the following four or six year period.[17] However, beginning in the 1966 comparison, schools with a percentage of black students between fifteen and twenty-nine tended to remain stably desegregated and did not have a much higher proportion of black students, on the average, four or six years later.

TABLE 3

Comparisons of Percentage of Black Students Four to Six Years Following Selected Years and Levels of Desegregation Among Kansas City Elementary Schools*

*A) Schools 15 to 29 Black in Designated Year
B) " 30 to 45 " " " "
C) " 46 to 60 " " " "
D) " 61 to 80 " " " "

Year for Comparison Groups	Subsequent Time Period for Comparison and Average Percent of Black Students for Comparison Groups **	
1960	1966	
	A (N = 5)	54.6%
	B (N = 3)	66.7%
	C (N = 1)	97.9%
	D (N = 0)	-
1962	1966	
	A (N = 5)	45.5%
	B (N = 2)	40.1%
	C (N = 3)	83.9%
	D (N = 0)	-
1964	1970	
	A (N = 4)	51.2%
	B (N = 4)	41.3%
	C (N = 2)	92.8%
	D (N = 1)	97.5%
1966	1970	
	A (N = 9)	24.3%
	B (N = 4)	56.2%
	C (N = 2)	57.0%
	D (N = 2)	92.8%
1968	1974	
	A (N = 10)	29.8%
	B (N = 4)	60.0%
	C (N = 1)	97.1%
	D (N = 4)	95.5%
1970	1974	
	A (N = 8)	31.9%
	B (N = 3)	76.4%
	C (N = 1)	95.0%
	D (N = 2)	99.9%

** Numbers of schools in the categories differ between Table 1 and Table 3 due to missing data for some school in some years. Group D was not included in the Table 1 analysis because there was too little room for a percentage increase to allow for meaningful analysis.

This pattern may indicate that there is a good chance to maintain desegregation in Kansas City schools as long as the percentage of minority students is not much over thirty percent. It may also be true, however, that schools between thirty and forty-five percent black can also maintain a good racial balance--schools in this range in the 1966, 1968, and 1970

periods became predominantly black in subsequent years, but there were only eleven schools in these categories and one cannot draw confident conclusions from so small a sample.

3. Changes in the number of white students in schools with differing percentages of black students.

One additional way to examine the possibility that decline in the enrollment of white students is associated with level of desegregation is to consider the actual number of white students in schools at differing levels of desegregation and determine the degree to which white enrollment may be rising or falling. This approach has the advantage of being independent of general enrollment changes which may be occurring and which might obscure the relationship between desegregation and white withdrawal.

To examine this possibility we computed a ratio based on the number of white students in 1974 divided by the number of white students in 1968 for elementary schools with the following percentages of black students in 1968: fifteen to twenty-nine; thirty to forty five; forty-six to sixty; and sixty-one to eighty. A high ratio represents a case in which the number of whites in 1974 was nearly as high as in 1968, and a low ratio represents a case in which there were fewer whites in 1974 than in 1968. The results are shown in Table 4.

TABLE 4

Ratio of White Students in 1974 to White Students in 1968 for Schools with Differing Percentages of Black Students in 1968

Percentage of Black Students		Ratio
15-29	(N = 10)	.45
30-45	(N = 4)	.27
46-60	(N = 1)	.03
61-80	(N = 4)	.08

As shown in Table 4, the number of white students in 1974 as compared with 1968 was substantially higher (1974-1968 ratio = .45) at the ten schools in which black students constituted between fifteen and twenty-nine percent of the enrollment in 1968 than at the nine schools in which black students constituted between thirty and eighty percent of the enrollment. This finding suggests that white enrollment declined in the latter schools at a much more rapid rate than was true at the schools in which black students constituted less than thirty percent of the enrollment.

4. Statistical correlation between changes in racial composition in two year periods.

Another way to examine the question of whether increases in black enrollment in one time period are associated with still higher increases in subsequent time periods is by computing the correlation between changes in racial composition at differing times.

To assess the relationships between changes in elementary school racial composition during different time periods, we computed the correlation between increases in percentage of black enrollment for adjacent two year periods between 1956 and 1974. If schools which increase in percentage black enrollment during one time period also increase during the following time period, the correlation between these increases will be positive and significantly different from zero. Simple correlations between increases in percentage of black students in Kansas City elementary schools for the two year periods are shown in the second column of Table 5. To reduce counfounding effects due to schools which had few or no black students during the 1960's, only thirty-three schools which had at least 2% black enrollment in 1964 were included in this analysis.

TABLE 5

Correlations Between Increases in Percentage of Black Students for Selected Two Year Periods Between 1956 and 1974

Time Period Examined	Correlation	p	Correlations Between Logged Scores	p
1956 to 1958 with 1958 to 1960	.60	<.001	.57	<.001
1958 to 1960 with 1960 to 1962	.63	<.001	.70	<.001
1960 to 1962 with 1962 to 1964	.42	<.015	.63	<.001
1962 to 1964 with 1964 to 1966	.08	<.625	.46	<.007
1964 to 1966 with 1966 to 1968	.47	<.006	.62	<.001
1966 to 1968 with 1968 to 1970	-.08	<.638	.19	<.300
1968 to 1970 with 1970 to 1972	.00	<.976	.47	<.006
1970 to 1972 with 1972 to 1974	-.12	<.49	.14	<.450

The correlations in column two of Table 5 indicate that increases in percentage black in one two year period generally were associated with increases in the following two year period. They do not, however, indicate whether the amount of increase tended to be higher in later than in earlier periods or whether increases in earlier periods were associated with still larger increases in later periods. If the latter were the case, the pattern of association when each school is plotted for a set of two year periods might look something like shown in Figure 1.

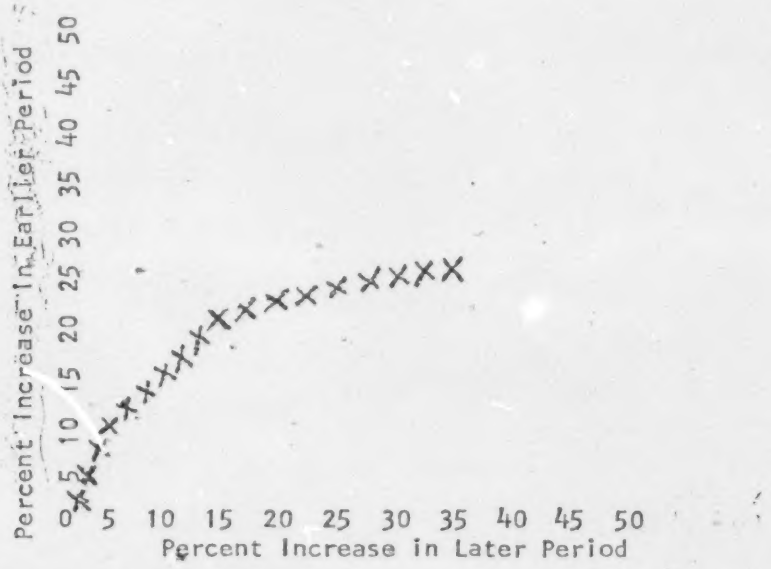

Figure 1. Hypothetical Plot Showing Relationship Between Increase in Percentage Black

The pattern shown above would incidate that schools which increased a small amount in period A also increased a small amount in period B, schools which increased a moderate amount in period A (e.g. increases between 10 and 20) tended to increase a moderate amount (05 to 15) in period B, and schools which increased a large amount in Period A (20 to 25) increased a relatively large amount (15 to 35) in period B.

Actual plots for the two year periods between 1956 and 1974 were examined and several were found similar to that shown in Figure 1. This indicates that a number of schools which increased in percentage black during one time period either had a sharp rise in the percentage black during the following period or continued to increase about the same amount as in the preceding period. In many cases, schools in this latter category were approaching one hundred percent black and had no more "room" to increase.

If a curve such as that shown in Figure 1 were present in our data, logging both variables should substantially increase the correlation between them. Correlations among the logged data for the two year periods are shown in the fourth column of Table 5. Several of the correlations increased dramatically, particularly where they were not already quite high for data of this kind. Thus the data in Table 5 suggest that Kansas City schools frequently experienced an acceleration in the increase in their black enrollment percentage once they already had begun to increase in this characteristic during the 1956-1974 time period.

Summary and Conclusions

A review of the literature on white enrollment decline in desegregated schools indicated that the controversy which recently became intense among researchers in this area has been at least partly resolved through agreement that such decline is most likely to occur in big city school districts with a relatively high proportion of minority students surrounded by largely white smaller districts. In addition, the literature underlines the difficulties of analyses mixing school districts which differ greatly in characteristics such as neighborhood housing patterns, thus suggesting the desirability of conducting longitudinal case studies of change in racial composition at the building level in individual districts.

The study reported herein utilized data from 1956 to 1974 on enrollment trends in the Kansas City, Missouri Public School District, a relatively large midwestern district which is surrounded by predominantly white smaller districts and has been undergoing decline in the proportion of white students for most of the period since 1956. If it is true that white enrollment decline is most likely to be accelerated by desegregation in districts of this type, longitudinal data on enrollment and racial composition in the Kansas City schools should elucidate this phenomena.

Enrollment data were examined to determine whether level and rate of desegregation have been associated with decline in white enrollment in the district. Data on percentage of black students indicated that schools between 15 and 29% black increased 11% in percentage black during the subsequent two years, as compared with increases of 18% and 28%, respectively, for schools 30 to 45% black and schools 46 to 60%

black. Analogously, schools which increased 1 to 10 percent in proportion black during various one- and two-year periods between 1956 and 1972 increased an average of 8 percent in proportion black during the following two years, as compared with 16% for schools which increased more than 10% in percentage black during the preceding period. Similarly, schools which had black percentages between 15 and 29 in 1966, 1968, and 1970 tended to remain desegregated, while schools with a higher percentage of black students became almost totally resegregated during the following four to six years. Examination of data on the ratio of white students in 1974 to 1968 indicated that the number of white students fell much faster during this period in schools 30 to 80% black than in schools 15 to 29% black. Finally, correlation data and scatterplots indicated that a number of schools experienced an accelerating increase in percentage of black students during the eighteen year period between 1956 and 1974.

Although most of the data presented above deal with the percentage of white and black students and thus do not directly address the issue of whether white enrollment declines attendant to desegregation occurred in absolute terms, the findings were consistent with the conclusion that white enrollment decline has tended to accelerate in schools with a relatively high percentage of black students (above about 30%) and/or a recent rapid increase in the percentage of black students. These findings suggest that policymakers should be cautious in determining the level and rate of desegregation to be obtained in the near future in big city school districts like Kansas City, if one of their goals is to avoid accelerating declines in white enrollment which have helped resegregate many big city schools during the past twenty years.

NOTES

[1]Michael W. Giles, Everett F. Cataldo, "The Impact of Busing on White Flight," Social Science Quarterly, v. 55 (1974) pp. 493-501.

[2]James S. Coleman, "Recent Trends in School Integration," Educational Researcher, v. 4 (1975) pp. 3-12.

[3]Reynolds Farley, "School Integration and White Flight," University of Michigan Population Studies Center (1975).

[4]Ibid., p. 6.

[5]Ibid., p. 8.

[6]Gregg Jackson, "Reanalysis of Coleman's 'Recent Trends in School Integration,'" Educational Researcher, v. 4 (1975) pp. 21-26.

[7]Ibid., p. 24.

[8]Ibid., p. 25.

[9]Christine H. Rossell, "The Political and Social Impact of School Desegregation Policy: A Preliminary Report." Paper presented at the annual meeting of the American Political Science Association, San Francisco, (1975) pp. 53-54.

[10]Ibid., pp. 53-54.

[11]Robert L. Green and Thomas F. Pettigrew, "Public School Desegregation and White Flight: A Reply to Professor Coleman." Paper prepared for United States Civil Rights Commission, Washington, D. C., (1975).

[12]Ibid., p. 38.

[13]Ibid., p. 36-37.

[14]Robert G. Wegman, "White Flight: Some Hypotheses." Paper presented at the annual meeting of the American Educational Research Association, San Francisco, (1976) pp. 33-34.

[15]James S. Coleman, "Coleman on Jackson and Coleman," Educational Researcher, v. 5 (1976) p. 4.

[16]Ibid., p. 4.

[17]The numbers shown in Table 3 reflect the fact that more KCSD elementary schools became desegregated and resegregated in the latter 1960's than in the early 1970's, primarily because schools on the Southeast Side were undergoing rapid racial change in the later period.